

FILEID**LIBLEN

M 2

LL IIIIII BBBBBBBBBB LL EEEEEEEEE NN NN
LL IIIIII BBBBBBBBBB LL EE NN NN
LL IIII BB BB LL EE NN NN
LL IIII BB BB LL EE NNNN NN
LL IIII BB BB LL EE NNNN NN
LL IIII BBBBBBBBBB LL EEEEEEEEE NN NN
LL IIII BBBBBBBBBB LL EEEEEEEEE NN NN
LL IIII BB BB LL EE NN NN
LL IIII BBBBBBBBBB LLLLLLLLLL EEEEEEEEE NN NN
LL IIII BBBBBBBBBB LLLLLLLLLL EEEEEEEEE NN NN
LLLLLLLLLL IIIIII BBBBBBBBBB LLLLLLLLLL EEEEEEEEE NN NN

LL IIIIII SSSSSSSS
LL IIIIII SSSSSSSS
LL IIII SS
LL IIIIII SSSSSSSS
LL IIIIII SSSSSSSS

; Return length of string

N 2

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(2) 49 HISTORY ; Detailed Current Edit History
(3) 69 DECLARATIONS
(4) 99 LIB\$LEN - Return length of string as INTEGER*4 value

```
0000 1      :TITLE LIB$LEN          ; Return length of string
0000 2      :IDENT /1-006/        ; File: LIBLEN.MAR Edit: RKR1006
0000 3
0000 4
0000 5*****+
0000 6
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0000 24
0000 25
0000 26*****+
0000 27
0000 28
0000 29 :FACILITY: General Utility Library
0000 30 ++
0000 31 :ABSTRACT:
0000 32
0000 33     Return length of a string as an INTEGER*4 value.
0000 34
0000 35 --
0000 36
0000 37 :VERSION: 0
0000 38
0000 39 :HISTORY:
0000 40
0000 41 :AUTHOR:
0000 42     Thomas N. Hastings, 6-Aug-77: Version 0
0000 43
0000 44 :MODIFIED BY:
0000 45
0000 46
0000 47 :
```

0000 49 .SBTTL HISTORY ; Detailed Current Edit History
0000 50
0000 51
0000 52 . Edit History for Version 0
0000 53
0000 54 : 0-3 - return word TNH 16-SEP-77
0000 55 : 1-001 - Update version number and copyright date, and correct
0000 56 : the comment of the INDENT line about the file name.
0000 57 : The last edit number of version 0 was 4. JBS 16-NOV-78
0000 58 : 1-002 - Add " " to PSELECT directive. JBS 21-DEC-78
0000 59 : 1-003 - Return current length of VS class string. SBL 22-Dec-1980
0000 60 : 1-004 - Enhance to recognize additional classes of string descriptors
0000 61 : by invoking LIBSANALYZE_SDESC_R3 to extract length and address
0000 62 : of 1st data byte from descriptor. RKR 22-MAY-1981
0000 63 : 1-005 - Add special-case code to process string descriptors that
0000 64 : "read" like fixed string descriptors. RKR 7-OCT-1981.
0000 65 : 1-006 - Redirect jsb's from LIBSANALYZE_SDESC_R3 to
0000 66 : LIBSANALYZE_SDESC_R2. Remove R3 from entry mask.
0000 67 : RKR 18-NOV-1981.

0000 69 .SBTTL DECLARATIONS
0000 70
0000 71
0000 72 : INCLUDE FILES: NONE
0000 73
0000 74
0000 75 : EXTERNAL SYMBOLS:
0000 76
0000 77 :DSABL GBL
0000 78 :EXTRN LIB\$ANALYZE_SDESC_R2 ; Explicit externals only
0000 79 ; Extract length and addr of
0000 80 ; 1st data byte of string
0000 81
0000 82 : MACROS:
0000 83
0000 84 :\$DSCDEF ; fields within a descriptor
0000 85
0000 86
0000 87 : PSECT DECLARATIONS:
0000 88
0000 89 :.PSECT _LIB\$CODE PIC,SHR,LONG,EXE,NOWRT
0000 90
0000 91 : EQUATED SYMBOLS: NONE
0000 92
0000 93
0000 94
0000 95 : OWN STORAGE:
0000 96
0000 97

0000 99 .SBTTL LIB\$LEN - Return length of string as INTEGER*4 value
 0000 100
 0000 101 ++
 0000 102 : FUNCTIONAL DESCRIPTION:
 0000 103
 0000 104 : Return the length of the string argument as an INTEGER*4 value.
 0000 105
 0000 106 : CALLING SEQUENCE:
 0000 107
 0000 108 : String_len.wlu.v = LIB\$LEN (string.rt.dx)
 0000 109
 0000 110
 0000 111 : INPUT PARAMETERS:
 0000 112 00000004 113 : STRING = 4 : String passed by descriptor.
 0000 114
 0000 115 : IMPLICIT INPUTS:
 0000 116 : NONE
 0000 117
 0000 118 : OUTPUT PARAMETERS:
 0000 119 : NONE
 0000 120
 0000 121 : IMPLICIT OUTPUTS:
 0000 122 : NONE
 0000 123
 0000 124 : FUNCTION VALUE:
 0000 125
 0000 126 : STRING_LEN.wlu.v The current length of the string
 0000 127 argument.
 0000 128
 0000 129 : SIDE EFFECTS:
 0000 130 : NONE
 0000 131
 0000 132 :--
 0000 133
 0000 134
 0000 135
 0004 0000 136 .ENTRY LIB\$LEN, "M<R2>" : entry mask
 02 04 AC 00 0002 137 MOVL STRING(AP), R0 : address of string descriptor
 02 03 A0 91 0006 138 CMPB DSC\$B_CLASS(R0), #DSC\$K_CLASS_D ; read like fixed?
 05 05 1A 000A 139 BGTRU 1\$: no
 50 04 BC 3C 000C 140 MOVZWL @STRING(AP), R0 : length to output register
 04 04 0010 141 RET
 0000 142
 0000 143 1\$: JSB G^LIB\$ANALYZE_SDESC_R2 : Extract: length->R1, addr->R2
 00000000'GF 16 0011 144 MOVZWL R1, R0 : length to output register
 50 51 3C 0017 145 RET
 04 001A 146 .END : End of module LIB\$LEN
 001B 146

LIB\$LEN
Symbol table

; Return length of string

F 3

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6-SEP-1984 11:08:23 [LIBRTL.SRC]LIBLEN.MAR;1

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(4)

DSC\$B_CLASS
DSC\$K_CLASS_D
LIB\$ANALYZE_SDESC_R2
LIB\$LEN
STRING

= 00000003
= 00000002

00000000 RG X 00
= 00000004

+-----+
! Psect synopsis !
+-----+

PSECT name

| PSECT name | Allocation | PSECT No. | Attributes |
|------------|-----------------|-----------|---|
| ABS | 00000000 (0.) | 00 (0.) | NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE |
| \$ABSS | 00000000 (0.) | 01 (1.) | NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE |
| _LIB\$CODE | 0000001B (27.) | 02 (2.) | PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC LONG |

+-----+
! Performance indicators !
+-----+

Phase

| Phase | Page faults | CPU Time | Elapsed Time |
|------------------------|-------------|-------------|--------------|
| Initialization | 30 | 00:00:00.04 | 00:00:01.12 |
| Command processing | 113 | 00:00:00.29 | 00:00:04.02 |
| Pass 1 | 131 | 00:00:01.12 | 00:00:08.72 |
| Symbol table sort | 0 | 00:00:00.12 | 00:00:00.28 |
| Pass 2 | 39 | 00:00:00.31 | 00:00:02.39 |
| Symbol table output | 2 | 00:00:00.01 | 00:00:00.01 |
| Psect synopsis output | 3 | 00:00:00.01 | 00:00:00.01 |
| Cross-reference output | 0 | 00:00:00.00 | 00:00:00.00 |
| Assembler run totals | 320 | 00:00:01.92 | 00:00:16.88 |

The working set limit was 1050 pages.

7650 bytes (15 pages) of virtual memory were used to buffer the intermediate code.

There were 10 pages of symbol table space allocated to hold 134 non-local and 1 local symbols.

146 source lines were read in Pass 1, producing 13 object records in Pass 2.

8 pages of virtual memory were used to define 7 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name

_S255\$DUA28:[SYSLIB]STARLET.MLB:2

Macros defined

4

190 GETS were required to define 4 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$LIBLEN/OBJ=OBJ\$LIBLEN MSRC\$LIBLEN/UPDATE=(ENH\$LIBLEN)

0208 AH-BT13A-SE
VAX/VMS V4.0

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